

CLAIMS

1. A wood treating formulation, characterized in that the formulation is a mixture of a first solution containing styrene and a second solution containing furfuryl alcohol.
5. 2. The wood treating formulation of claim 1, characterized in that the first solution further consists of initiators and a crosslinker, and the second solution further consists of an initiator.
10. 3. The wood treating formulation of claim 2, characterized in that the initiators of the first solution are a combination of 2,2'-azobis(2-methylbutane-nitrile), 1,1'-azobis(cyclohexane-carbonitrile) and tertiary butyl perbenzoate.
15. 4. The wood treating formulation of claim 2, characterized in that the crosslinker of the first solution is divinyl benzene.
5. 5. The wood treating formulation of claim 2, characterized in that a mineral oil or wax optionally is present in the first solution as an extender.
15. 6. The wood treating formulation of claim 2, characterized in that the initiator of the second solution is maleic anhydride.
7. 7. The wood treating formulation of claim 3, characterized in that about 0,3% of 2,2'-azobis(2-methylbutane-nitrile) based on styrene is present in the first solution.
20. 8. The wood treating formulation of claim 3, characterized in that about 0,4% of 1,1'-azobis(cyclohexane-carbonitrile) based on styrene is present in the first solution.
9. 9. The wood treating formulation of claim 3, characterized in that about 0,5% of tertiary butyl perbenzoate based on styrene is present in the first solution.
25. 10. The wood treating formulation of claim 4, characterized in that about 3,5% of divinyl benzene based on styrene is present in the first solution.
11. 11. The wood treating formulation of claim 5, characterized in that 0 to 30% of mineral oil or wax based on styrene is present in the first solution.
30. 12. The wood treating formulation of claim 1, characterized in that 10 to 30% of furfuryl alcohol, which is based on the styrene of the first solution, is present in the second solution.
13. 13. The wood treating formulation of claim 6, characterized in that 5 to 10% of maleic anhydride based on furfuryl alcohol is present in the second solution.

14. A process for producing a wood treating formulation, characterized in that the formulation is prepared by combining a first solution containing styrene and a second solution containing furfuryl alcohol.

5 15. The process of claim 14, characterized in that the first solution is prepared by dissolving initiators and a crosslinker in the styrene, and the second solution is prepared by dissolving an initiator in the furfuryl alcohol.

10 16. The process of claim 15, characterized in that the initiators of the first solution are selected from a combination of 2,2'-azobis(2-methylbutane-nitrile), 1,1'-azobis(cyclohexane-carbonitrile) and tertiary butyl perbenzoate.

15 17. The process of claim 15, characterized in that the crosslinker of the first solution is divinyl benzene.

18. The process of claim 15, characterized in that a mineral oil or wax optionally is present in the first solution as an extender.

19. The process of claim 15, characterized in that the initiator of the second solution is maleic anhydride.

20 20. The process of claim 16, characterized in that about 0,3% of 2,2'-azobis(2-methylbutane-nitrile) based on styrene is present in the first solution.

21. The process of claim 16, characterized in that about 0,4% of 1,1'-azobis-(cyanocyclohexane-carbonitrile) based on styrene is present in the first solution.

25 22. The process of claim 16, characterized in that about 0,5% of tertiary butyl perbenzoate based on styrene is present in the first solution.

23. The process of claim 17, characterized in that about 3,5% of divinyl benzene based on styrene is present in the first solution.

24. The process of claim 18, characterized in that 0 to 30% of mineral oil or wax based on styrene is present in the first solution.

30 25. The process of claim 14, characterized in that 10 to 30% of furfuryl alcohol, which is based on the styrene of the first solution, is present in the second solution.

26. The process of claim 19, characterized in that 5 to 10% of maleic anhydride based on furfuryl alcohol is present in the second solution.

35 27. The process of claim 14, characterized in that the wood treating solution is impregnated by immersing wood in the formulation and applying a vacuum and pressure cycle to force the formulation into the wood.

28. The process of claim 14, characterized in that curing of the treating formulation impregnated in the wood is carried out by heating.
29. The process of claim 28, characterized in that polymerization is carried out by heating the impregnated wood sufficiently for it to reach 80 C in the center.
- 5 30. The process of claim 28, characterized in that finishing polymerization for products where odour must be kept to a minimum is carried out by heating the impregnated wood sufficiently for it to reach 120 C in the center for at least one hour.